

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/670,073 09/26/2000		09/26/2000	Richard M. Shupak	777.345US1	5749		
27488	7590	06/23/2004		EXAMI	EXAMINER		
MERCHA	NT & G	OULD	BATES, KEVIN T				
P.O. BOX 2 MINNEAPO		N 55402-0903	ART UNIT	PAPER NUMBER			
M				2155	1.		
				DATE MAILED: 06/23/2004	11		

Please find below and/or attached an Office communication concerning this application or proceeding.

•	•	Application	n No.	Applicant(s)					
	Office Astion Course	09/670,07	3	SHUPAK ET AL.					
	Office Action Summary	Examiner		Art Unit					
		Kevin Bate	<u> </u>	2155					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timety filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1)⊠	Responsive to communication(s) filed on 2	22 April 2004.							
·									
3)□									
•-	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
5)□ 6)⊠ 7)□	Claim(s) <u>1-63</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) <u>1-63</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement.								
Applicat	ion Papers								
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C. § 119									
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
2) Notice	ot(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO-1449 or PTO/SE		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P	ite	D-152)				
	er No(s)/Mail Date	, ,	6) Other:						

Art Unit: 2155

DETAILED ACTION

This Office Action is in response to a communication made on April 24, 2004.

Claims 1-63 are pending in this application.

Response to Amendment

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-45 and 47-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Leblang (5649200).

Regarding claim 1, Leblang discloses a computer-readable medium having computer-executable instructions comprising: querying a first server for a location of a second server (Column 5, lines 45 - 53; Column 8, lines 31 - 35), the second server comprising update information associated with an executable (Column 6, lines 4 - 19); linking the first server to the second server (Column 8, lines 31 - 35); querying the second server for the update information (Column 11, lines 53 - 64); receiving the update information from the second server (Column 9, lines 41 - 45; Column 12, lines 8 - 17), and updating software associated with the executable based on the update information (Column 9, lines 41 - 45).

Art Unit: 2155

Regarding claim 2, Leblang discloses that querying a first server <u>further</u> <u>comprises</u> providing a path to a look up HyperText Transfer Protocol (HTTP) symbol location server (Column 8, lines 43 – 51).

Regarding claim 3, Leblang discloses that querying a first server <u>further</u> <u>comprises</u> querying a Dynamic Host Configuration Protocol (DHCP) server and requesting Uniform Resource Identifiers (URIs) to query the second server for the <u>update</u> information (Column 6, lines 1 – 19).

Regarding claim 4, Leblang discloses that querying a first server <u>further</u> <u>comprises</u> querying a Domain Name System (DNS) server for a service (SRV) record identifying the second server to be queried (Column 8, lines 43 – 51).

Regarding claim 5, Leblang discloses that querying a first server <u>further</u> <u>comprises</u> querying a directory service for the location of the second server (Column 6, lines 51 – 61).

Regarding claim 6, Leblang discloses that querying a first server <u>further</u> <u>comprises</u> querying an Application Configuration, Access Protocol (ACAP) server for the location of the second server (Column 12, lines 56 – 67).

Regarding claim 7, Leblang discloses that querying a first server <u>further</u> <u>comprises</u> querying a Lightweight Directory Access Protocol (LDAP) server for the location of the second server (Column 8, lines 30 – 35; Column 11, lines 61 – 64).

Regarding claim 8, Leblang discloses a <u>computer-readable medium having</u>

<u>computer-executable instructions</u> comprising: <u>creating a path to a symbol location</u>

server without registering the path in an environment variable (Column 14, lines 25 –

Art Unit: 2155

39); querying the symbol location server through the path for symbols associated with a local file wherein the path is created based on the type of symbols (Column 16, lines 31 – 44; lines 62 – 67); receiving the symbols from symbol location server through the path; and updating software associated with the local file based on the received symbols (Column 18, lines 25 – 32).

Regarding claim 9, Leblang discloses that querying the <u>symbol location server</u> further comprises querying the <u>symbol location server</u> with a unique identifier composed of different values from an image header extracted from the local file (Column 15, lines 47 – 51; Column 10, line 65 – Column 11, line 3).

Regarding claim 10, Leblang discloses that the unique identifier composed of different values from an image header includes values, which are not replicated between differing versions of the local file (Column 9, lines 47 – 57).

Regarding claim 11, Leblang discloses that receiving the symbols <u>further</u> <u>comprises</u> receiving <u>a file</u> comprising the symbols, wherein the file is stored in a local system memory (Column 13, line 65 – Column 14, line 7).

Regarding claim 12, Leblang discloses that querying the symbol location server for <u>further comprises</u> querying the symbol location server with a user customized query which extracts over a back end store (Column 16, lines 40 - 44).

Regarding claim 13, Leblang discloses a <u>computer-readable medium having</u>

<u>computer-executable instructions comprising: creating a path to a first server</u>

<u>comprising location information for a second server comprising update information</u>

associated with an executable without registering the path with an environment variable

Art Unit: 2155

(Column 14, lines 25 – 39; Column 2, line 2); querying the first server through the path for the update information (Column 2, lines 6 – 14); receiving the update information from the first server through the path; and updating software associated with the executable based on the update information (Column 2, lines 53 – 64; Column 11, lines 53 – 60).

Regarding claim 14, Leblang discloses that receiving the update information further comprises receiving reference location on the second server which is used to access a file associated with the executable on the second server (Column 2, line 65 – Column 3, line 10).

Regarding claim 15, Leblang discloses the idea of querying the first server further comprises querying a server selected from a group consisting of a DHCP server, a DNS server, an ACAP server, and a LDAP server (Column 3, lines 31 – 40; Column 2, line 65 – Column 3, line 1; Column 8, lines 43 – 51; Column 12, lines 56 – 67) where the type of connection and query and action the user takes, allows the system to take different action with the first server/ distributed system.

Regarding claim 16, Leblang discloses that querying the first server further comprises querying a set of servers in parallel (Column 16, lines 6 – 9) where the script allows the search of may objects/files at once and it also allows different types of searching for those files such as certain version location or query into the metadata.

Regarding claim 17, Shklar discloses that querying the <u>first server further</u>

<u>comprises</u> querying <u>a set</u> of servers in a serial order (Column 2, lines 65 – Column 3, line 4; Column 16, lines 62 – 67) because in order to connect all the objects and locate

Art Unit: 2155

all related information to those objects the system needs to transverse all paths and types of location techniques in the system, such as first locating the object and the pathnames to that objects versions, then looking in the object directory for metadata leading to hyperlinks for other objects which are merged or related.

Regarding claim 18, Leblang discloses that querying the first server further comprises packaging information extracted from the executable into a HyperText Transfer Protocol (HTTP) request and sending the HTTP request to first server (Column 9, lines 47 – 61).

Regarding claim 19, Leblang discloses a computer-readable medium having computer-executable instructions comprising: querying a <u>first server comprising</u> location information for a second server <u>comprising update</u> information associated with an executable (Column 2, lines 53 – Column 3, line 9); receiving the location information from the first server; <u>creating a path to the second server based on the type of update information without registering the path in an environment variable (Column 2, lines 53 – Column 3, line 9; Column 16, lines 31 – 44)); querying the second server <u>through the path</u> for the <u>update</u> information associated with the executable using a syntax based on the location information received for the second server (Column 16, lines 40 – 44; Column 16, line 62 – Column 17, line 5); <u>and updating software associated with the executable based on the update information (Column 2, lines 53 – 64; Column 11, lines 53 – 60).</u></u>

Art Unit: 2155

Regarding claim 20, Leblang discloses that querying a first <u>server further</u> comprises querying the first <u>server</u> using metadata associated with the executable (Column 15, lines 46 – 50).

Regarding claim 21, Leblang discloses that querying the second server <u>further</u> <u>comprises</u> querying the second server using metadata associated with the executable (Column 16, lines 40 - 44; lines 63 - 67).

Regarding claim 22, Leblang discloses that the metadata comprises metadata for a number of debug files (Column 17, lines 2 - 10).

Regarding claim 23, Leblang discloses that the metadata comprises metadata for a number of source files (Column 2, lines 23 – 29).

Regarding claim 24, Leblang discloses that querying the second server <u>further</u> <u>comprises</u> querying the second server for symbols associated with the executable file (Column 2, lines 65 – Column 3, line 4).

Regarding claim 25, Leblang discloses that querying the second server <u>further</u> <u>comprises</u> querying the second server for regression analysis data associated with the executable file (Column 5, line 61 – Column 6, line 3).

Regarding claim 26, Leblang discloses that querying the second server <u>further</u> <u>comprises</u> querying the second server for performance analysis data associated with the executable file (Column 5, line 61 – Column 6, line 3).

Regarding claim 27, Leblang discloses that querying the second server <u>further</u> <u>comprises</u> querying the second server for source code associated with the executable file (Column 5, line 61 – Column 6, line 3).

Art Unit: 2155

Regarding claim 28, Leblang discloses that querying the second server <u>further</u> <u>comprising</u> receiving files <u>comprising</u> the <u>update</u> information associated with the executable file (Column 5, line 61 – Column 6, line 3).

Regarding claim 29, Leblang discloses a <u>computer-readable medium having</u> <u>computer-executable instructions for updating a software program associated with an executable file</u> comprising: packaging metadata extracted from the executable file into an HTTP request (Column 2, lines 24 – 52); <u>creating a path to a locator server without registering the path with an environment variable (Column 14, lines 25 – 39; Column 2, line 2), the locator server comprising information for a server on which update information associated with the executable is located (Column 2, line 65 – Column 3, line 4); sending <u>through the path</u> the HTTP request to <u>the</u> locator servers; receiving <u>the update</u> information from <u>the</u> locator server through the path (Column 2, line 65 – Column 3, line 4); and updating the software program associated with the executable file based on the update information (Column 2, lines 53 – 64; Column 11, lines 53 – 60).</u>

Regarding claim 30, Leblang discloses that packaging metadata <u>further</u> <u>comprising</u> packaging metadata to locate an updated version of the executable file (Column 11, lines 53 – 64).

Regarding claim 31, Leblang discloses that packaging metadata <u>further</u> <u>comprises</u> packaging metadata for locating a debug file associated with the executable file (Column 17, lines 2 – 10).

Art Unit: 2155

Regarding claim 32, Leblang discloses that packaging metadata <u>further</u>

<u>comprises</u> packaging metadata to locate a specific build version of the executable file

(Column 9, lines 39 – 57).

Regarding claim 33, Leblang discloses that receiving the update information further comprises receiving an HTTP redirect (Column 2, line 65 – Column 3, line 1).

Regarding claim 34, Leblang discloses that receiving the update information further comprises receiving a location of the server on which the update information is located, and querying the server with a unique identifier for the update information (Column 7, lines 54 – 61; Column 17, lines 22 – 29).

Regarding claim 35, Leblang discloses that querying the server <u>further comprises</u> providing an additional qualifier (Column 15, lines 46 – 51).

Regarding claim 36, Leblang discloses a computerized system, comprising: a first server comprising location information for update information associated with a local file (Column 2, lines 53 – 64; Column 11, lines 53 – 60); a second server comprising the update information, wherein the first server is linked to the second server though a path that is created based on the type of updated information without registering the path with an environment variable (Column 2, line 65 – Column 3, line 4), and further wherein the first server receives the update information from the second server though the path (Column 15, line 56 – Column 16, line 9); and a computer comprising a local file, wherein the first server provides the update information to the computer such that software associated with the local file is updated based on the update information (Column 2, lines 53 – 64; Column 11, lines 53 – 60).

Art Unit: 2155

Regarding claim 37, Leblang discloses that the <u>update</u> information <u>comprises</u> debug information (Column 17, lines 2 - 10).

Regarding claim 38, Leblang discloses that the <u>update</u> information <u>comprises</u> solution access information (Column 5, line 61 – Column 6, line 5).

Regarding claim 39, Leblang discloses that the computer <u>reads</u> the <u>update</u> information from the second server (Column 8, lines 31 – 35).

Regarding claim 40, Leblang discloses that the first server <u>comprises</u> a HyperText Transfer Protocol (HTTP) server (Column 8, lines 43 – 51).

Regarding claim 41, Leblang discloses that the HTTP server <u>comprises</u> a Dynamic Host Configuration Protocol (DHCP) server having Uniform Resource Identifiers (URIs) for querying the second server (Column 6, lines 1 – 19).

Regarding claim 42, Leblang discloses that the HTTP server <u>comprises</u> a Domain Name System (DNS) server having a service (SRV) record <u>for</u> identifying the second server (Column 8, lines 43 – 51).

Regarding claim 43, Leblang discloses that the HTTP server <u>comprises</u> a directory service <u>for providing</u> the location information for the update information to the computer (Column 6, lines 51 – 61).

Regarding claim 44, Leblang disclose that the first server <u>comprises</u> an Application Configuration Access Protocol (ACAP) server (Column 12, lines 56 – 67).

Regarding claim 45, Leblang discloses that the first server <u>comprises</u> a

Lightweight Directory Access Protocol (LDAP) server (Column 8, lines 30 – 35; Column

11, lines 61 – 64).

Art Unit: 2155

Regarding claim 47, Leblang discloses a computerized system, comprising: a first server comprising location information for update information associated with an executable file (Column 5, lines 45 – 53; Column 8, lines 31 – 35; Column 2, lines 53 – 64; Column 11, lines 53 – 60); a second server comprising the update information (Column 6, lines 4 – 10), wherein the first server is linked to the second server though a path that is created based on the type of update information without register the path with an environment variable (Column 2, line 67 – Column 3, line 4); and a computer comprising the executable file, wherein the first server is adapted to provide the computer with the location information (Column 2, line 67 – Column 3, line 4), and further wherein the computer uses the location information to query the second server through the path for the update information (Column 8, lines 43 – 51) such that software associated with the executable file is updated based on the update information (Column 2, lines 53 – 64; Column 11, lines 53 – 60).

Regarding claim 48, Leblang discloses the first server is selected from a group consisting of a DHCP server, a DNS server, an ACAP server, and a LDAP server (Column 3, lines 31 - 40; Column 2, line 65 -Column 3, line 1; Column 8, lines 43 - 51; Column 12, lines 56 - 67) where the type of connection and query and action the user takes, allows the system to take different action with the first server/ distributed system.

Regarding claim 49, Leblang discloses that the computer is configured to query a hierarchy of first servers in a serial order (Column 2, lines 65 – Column 3, line 4; Column 16, lines 62 – 67) because in order to connect all the objects and locate all

Art Unit: 2155

related information to those objects the system needs to transverse all paths and types of location techniques in the system, such as first locating the object and the pathnames to that objects versions, then looking in the object directory for metadata leading to hyperlinks for other objects which are merged or related.

Regarding claim 50, Leblang does not explicitly indicate that the computer is configured to query a hierarchy of first servers in a parallel order (Column 16, lines 6 – 9) where the script allows the search of may objects/files at once and it also allows different types of searching for those files such as certain version location or query into the metadata.

Regarding claim 51, Leblang does not explicitly indicate that the <u>update</u>
<u>information comprises solution access information (Column 5, line 61 – Column 6, line 5)</u>.

Regarding claim 52, Leblang does not explicitly indicate that the computer is configured to query the second server, in an HTTP request format (Column 9, lines 47 – 61), for the <u>update</u> information using <u>a qualifier associated with</u> the executable file (Column 15, lines 46 – 51).

Regarding claim 53, Leblang discloses that the query to the second server is performed using metadata extracted from the executable file (Column 2, lines 24 – 52).

Regarding claim 54, Leblang discloses that the metadata extracted from the executable file comprising metadata for a debug file associated with the executable (Column 17, lines 2 - 10).

Art Unit: 2155

Regarding claim 55, Leblang does not explicitly indicate that the metadata extracted from the executable file <u>comprises</u> metadata associated with regression analysis data for the executable file (Column 5, line 61 – Column 6, line 3).

Regarding claim 56, Leblang discloses that a computer readable medium having computer executable instructions to cause a computing system to perform a method <u>for updating software associated with an executable file</u> (Column 5, lines 45 – 53; Column 8, lines 31 – 35; Column 2, lines 53 – 64; Column 11, lines 53 – 60), comprising: creating a path for a lookup server to a server having update information associated with an executable file based on the type of update information without registering the path with an environment variable (Column 14, lines 25 – 39; Column 2, line 2); using the lookup server to identify location information for the server having the update information based on metadata extracted from the executable file; packaging an HTTP query for retrieving the <u>update</u> information <u>through the path (Column 2, line 67 – Column 3, line 4; Column 8, lines 31 – 35; Column 16, lines 31 – 44; lines 62 – 67); retrieving the update information; and updating the software associated with the executable file based on the update information (Column 2, lines 53 – 64; Column 11, lines 53 – 60).</u>

Regarding claim 57, Leblang discloses that using the lookup server <u>further</u> <u>comprises</u> providing a response to a requesting client from the lookup server (Column 16, lines 40 – 44; Column 17, lines 50 – 57).

Art Unit: 2155

Regarding claim 58, Leblang discloses that providing a response further comprises forwarding the location information to the requesting client as an HTTP redirect (Column 8, lines 31 - 35).

Regarding claim 59, Leblang discloses a method for <u>updating software</u> associated with a local file comprising: packaging metadata extracted from the local file into an HTTP request to <u>obtain information associated with the local file (Column 2, lines 24 – 52)</u>; sending the HTTP request to a locator server; receiving location information back from the locator server (Column 8, lines 31 – 35; Column 16, lines 40 – 44; Column 17, lines 50 – 57); packaging an HTTP query for retrieving the information associated with the local file based on <u>location</u> information (Column 8, lines 43 – 51); and <u>updating the software associated with the local file based on the information</u> associated with the local file (Column 2, lines 53 – 64; Column 11, lines 53 – 60).

Regarding claim 60, Leblang does not explicitly indicate that packaging an HTTP query <u>further comprises</u> qualifying the HTTP query to select a specific file version from the information associated with the local file (Column 8, lines 43 – 51).

Regarding claim 61, Leblang does not explicitly indicate that qualifying the HTTP query further comprises qualifying the HTTP query to select an updated file version associated with the local file (Column 11, lines 1-3)

Regarding claim 62, Leblang does not explicitly indicate that qualifying the HTTP query further comprises qualifying the HTTP query to select a specific debug file associated with the local file (Column 17, lines 1-9).

Art Unit: 2155

Regarding claim 63, Leblang discloses a server architecture, comprising; a first server; a second server linked to the first server (Column 5, lines 45 – 53; Column 8, lines 31 – 35; Column 2, lines 53 – 64; Column 11, lines 53 – 60), wherein the second server comprises update information associated with the executable file (Column 6, lines 4 – 10); means for interpreting metadata associated with an executable file received by the first server from a remote client (Column 16, lines 40 – 44); means for redirecting the remote client to the second server wherein the second server is adapted to interpret a query from the remote client for retrieving the update information (Column 8, lines 31 – 35; lines 43 – 51); and means for updating software associated with the executable based on the update information (Column 2, lines 53 – 64; Column 11, lines 53 – 60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leblang.

Regarding claim 46, Shklar does not explicitly indicate that the computer is networked to the first and the second servers over the Internet. Shklar discloses that the system is a distributed network, with servers and workstations (Column 6, lines 4 – 9) and that it uses pathnames to locate servers and information (Column 2, lines 65 – 66). It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 2155

invention was made to encourage the scalability of the system to enable it to run over a wider area network such as the Internet to allow a larger more geographically disperse development team to operate cooperatively in this system (Column 6, lines 10 – 26).

Response to Arguments

Applicant's arguments with respect to claims 1-63 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U. S. Patent No. 4714996 issued to Gladney, because it has a intercepter which finds a second location and looks for the requested information.
- U. S. Patent No. 6732358 issued to Siefert, because it uses a server to locate software updates at a separate location.
- U. S. Patent No. 6651249 issued to Waldin, because it uses a server to locate the software publisher and identify software updates.
- U. S. Patent No. 4558413 issued to Schmidt, because it involves searching for certain software versions and builds.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2155

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (703) 605-0633. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2155

KB

ΚB

June 18, 2004.

HOSAIN ALAM SUPERVISORY PATENT EXAMINER Page 18